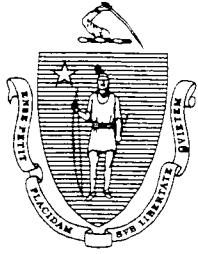


SECTION 2.0 - INTRODUCTION

2.0 INTRODUCTION

2.1 MEPA Certificate From New Bedford/Fairhaven Harbor DEIR

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JANE SWIFT
GOVERNOR

BOB DURAND
SECRETARY

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RECEIVED

JUN 17 2002

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June 14, 2002

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Dredged Material Management Plan
PROJECT MUNICIPALITY : New Bedford and Fairhaven
PROJECT WATERSHED : Buzzards Bay
EOEA NUMBER : 11669
PROJECT PROPONENT : Massachusetts Coastal Zone Management
DATE NOTICED IN MONITOR : May 8, 2002

As Secretary of Environmental Affairs, I hereby determine that the Draft Environmental Impact Report submitted on the above project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

This project is part of a state-wide Dredged Material Management Plan (DMMP) to address the issue of finding environmentally sound disposal sites for dredged material from the Commonwealth's eight Designated Port Areas (DPA) that is unsuitable for unconfined ocean disposal. This Draft EIR is being filed specifically for the DPA of New Bedford/Fairhaven Harbor. The DEIR deals with the disposal of dredged material and not with dredging itself. Individual dredging projects within the harbor must undergo their own environmental review.

Studies reported in the baseline demand analysis have estimated that up to 960,000 cubic yards (cy) of contaminated and otherwise unsuitable material from both public and private dredging projects will require management and disposal over the next 10 years to maintain the DPA as a viable working port.

The DEIR has provided a detailed and thorough analysis of a large variety of alternative disposal and de-watering sites and has presented a preferred alternative. The preferred alternative involves construction of two Confined Aquatic Disposal (CAD) sites within New Bedford/Fairhaven Harbor, one just north of Popes Island and the other in the Inner Channel. These CADs have the capacity to accommodate the estimated volume of dredged material and are in close proximity to the dredging areas. Based on the level of detail of information provided in the DEIR, the selection of this method of disposal and these CAD sites is reasonable on both environmental and economic grounds.

As the DEIR indicates, before a final decision is made on a management plan, there will need to be some additional site specific information provided in the Final EIR. That site specific information is identified in the DEIR and includes:

- Additional geotechnical borings
- Macrobenthic sampling and identification
- Current measurements and water column chemistry
- Dredging and disposal event modeling and hydrodynamic analyses
- Underwater archaeological surveys
- Physical and chemical analyses of surgical sediments

I expect that this information will be provided in the FEIR. Should this site-specific information indicate that the preferred alternative, in whole or part, is not suitable, the FEIR should provide the same level of information on any alternative site or methodology that might be chosen.

The DEIR has provided sufficient information to allow the dismissal of upland disposal and upland reuse of the dredged materials, and those options need not be carried forward in the FEIR. Nevertheless, while the DEIR has also shown that Alternative Technologies are not practicable or cost-effective at

this time, these technologies are being continuously advanced. Therefore, I expect that their use will be re-evaluated periodically by the proponent and the permitting agencies to determine whether all or some of the dredged material can be managed in the future using an improved Alternative Technology.

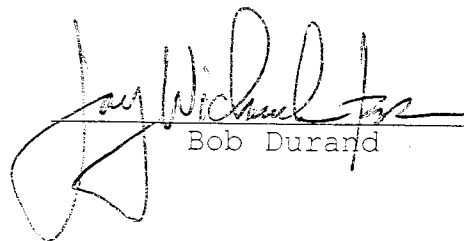
The DEIR has presented a Monitoring and Management Plan that uses a tiered monitoring strategy. Under this strategy, if lower level monitoring uncovers adverse effects, a higher level of monitoring would be implemented and, if necessary, management actions such as restricting or curtailing disposal operations might be implemented. The DEIR also identifies a number of Best Management Practices for the CADs that have been used in other disposal operations with considerable success.

The DEIR also indicates that the proponent intends to establish a Technical Advisory Committee that will include representatives of local, state and federal agencies. This group will establish what specific actions will be taken in response to monitored problems, and will determine who is responsible for taking any necessary actions. This group should also consult with the Division of Marine Fisheries (DMF) to develop a schedule for CAD use, and to develop appropriate plans for shellfish propagation and other mitigation measures, as indicated in the DMF comment.

I am pleased with the progress made to date on this important project and I look forward to reviewing the more detailed information in the FEIR.

June 14, 2002

Date


Bob Durand

Comments received :

Department of Environmental Protection
Division of Marine Fisheries

BD/rf

2.2 FEIR Organization

The organization of the New Bedford/Fairhaven Harbor DMMP FEIR follows the framework established in MEPA to fully explore alternatives, and is organized into the following sections.

Section 1.0 - Executive Summary, summarizes the report contents, lists the principal environmental impacts of the alternatives and identifies mitigation measures to be implemented to mitigate unavoidable environmental impacts. This section also indicates the steps that will be taken prior state designation.

Section 2.0 - Introduction, presents the reader with the background of the DMMP planning process, MEPA procedural history and a summary of “scoping” and coordination involved in developing this FEIR.

Section 3.0 – Additional Site-specific Aquatic Resource Information, presents additional and supportive preferred alternatives CAD site-specific resources information primarily suggested by the DEIR and concurred by the DEIR Certificate.

Section 4.0 - Selection Of The Preferred Alternative CAD Cell Site, outlines the application of the DMMP disposal site screening process and criteria. This section presents the evaluation of potential impacts and benefits associated with the preferred alternative CAD sites. This section details the potential impacts on specific resources in the vicinity of the CAD sites.

Section 5.0 - Detailed CAD Cell Dredging Disposal Event Modeling And Hydrodynamic Analyses, is a detailed description of affected environments in the vicinity of the preferred alternative PIN CAD cell site area. This section presents a series of computer simulations performed to estimate the water quality from dredging and disposal operations at the proposed PIN CAD site in the Harbor. The computer models BFHYDRO (Boundary Fitted Hydrodynamic model), SSFATE (Suspended Sediment FATE model), STFATE (Short-Term FATE dredged material disposal model) and BFMASS (Boundary Fitted Mass Transport model), were employed for hydrodynamic, dredging and disposal modeling, respectively.

Section 6.0 - Compliance with Regulatory Standards, is an overview of the current regulatory framework under which disposal of UDM occurs. This section describes the applicable regulations associated with implementing the preferred alternative.

Section 7.0 - Mitigation Measures, this section describes the associated measures to be taken to avoid, minimize or mitigate the negative impacts associated with implementation of the preferred alternatives. This section presents biological time-of-year dredging windows recommendations.

Section 8.0 –Dredging Management Plan, presents guidelines of monitoring the preferred alternatives for long-term environmental impacts and the management of operations for the preferred alternative disposal site.

SECTION 2.0 – INTRODUCTION

Section 9.0 - Section 61 Findings, are included as required by MEPA, to outline whether the implementation of the preferred alternative will be likely to cause either direct or indirect damage to the environment. This section makes findings describing potential environmental impacts confirming that all practicable measures have been taken to avoid, minimize or mitigate potential damage to the environment.

Section 10.0 - Response to Comments, is a comment-by-comment response to correspondence received by the MEPA office and resource agencies regarding the New Bedford/Fairhaven Harbor DMMP DEIR. This section contains a copy of the DEIR Certificate and resource agency comment letters with highlighted comments. A set of answers to each highlighted comment is provided immediately after each letter.

The structure and content of the New Bedford/Fairhaven Harbor DMMP FEIR is directly controlled by three primary sets of regulations. At the state level, the MEPA Scope that identifies the information that must be evaluated as part of the site identification process. This outline will ensure that the requirements of the state's environmental policies are met. At the federal level, the FEIR is subject to the provisions of Section 404 of the Clean Water Act (Section 404), and to the National Environmental Policy Act (NEPA). The Section 404 and NEPA outlines will ensure meeting the requirements of federal environmental policies.

The first task, then, was to integrate the requirements of these three authorities. To do this, previous projects that have faced the same task were investigated. First, site selection processes used by the state to site the Cape Cod Disposal Site (MADEM Generic EIR, 1992), and by the USACE and Massport to site the disposal cells for the Boston Harbor Navigation Improvement Project (USACE & Massport Final EIR, 1996) were evaluated. Then, at the direction of the federal agencies, the process used more recently by the Corps of Engineers for the federal Providence River Navigation Project (USACE DEIR, 1998) was also examined. After extensive discussion with the state and federal agencies, the screening process chosen was modeled after the Providence River project, in large part because the federal agencies who reviewed the DEIR developed the Providence screening, and were therefore familiar with the logic of the document.

The DEIR was reviewed in 2002 and the DEIR Certificate was issued June 14, 2002. The DEIR suggested and the Certificate concurred that certain site-specific resource information on the preferred alternative CAD sites was necessary to assist in the final alternatives screening for the preferred alternative in the FEIR. DEP and DMF submitted letters explaining each of the two agencies concerns expected to be addressed regarding the selection of the preferred alternative in the FEIR.

In the FEIR, CZM presents the additional resources information that proved helpful in the analysis and final selection of the preferred alternative CAD site for the Harbor.

2.3 New Bedford/Fairhaven Harbor

New Bedford/Fairhaven Harbor (Harbor) is located on the west side of Buzzards Bay, at the mouth of the Acushnet River. The Harbor is located about 166 miles from New York via Long Island Sound and 83 miles from Boston via the Cape Cod Canal. A gated hurricane barrier across the lower harbor, completed in 1966, protects the New Bedford, Fairhaven and Acushnet area from tidal storms. The Harbor includes all the tidewater lying northerly of a line from Clarks Point at the southern extremity of New Bedford to Wilbur Point at the southern end of Fairhaven, and extends to the head of navigation on the Acushnet River at Acushnet. The outer harbor consists of the area south of the hurricane barrier at Palmer Island, and the inner harbor consists of the area north of the barrier to a short distance above the New Bedford/Fairhaven Bridge (USACE 1996).

The federal navigation channel in the Harbor consists of a main channel authorized extending from deep water in Buzzards Bay through the New Bedford-Fairhaven Bridge (U.S. Route 6); a channel extending from the lower maneuvering area along the upper waterfront to the vicinity of Fish Island and the swing bridge; a channel west of Pierce and Kilburn Wharf to the old causeway pier; and an anchorage area north of Palmer Island, off the Fairhaven main waterfront. (USACE 1996)

The Harbor has a history of seafaring traditions that continue today with an active fishing fleet. New Bedford/Fairhaven Harbor hosts a wide variety of vessel traffic. The fishing fleet is the most important with more than two hundred (200) vessels operating out of the Harbor. The bulk of the vessels are steel hulled vessels fishing for ground fish and scallops supplying the nation with fish products. Maritime support industries in the Harbor include vessel maintenance and repair facilities, both dockside and/or at various facilities along the waterfront. Equipment and provisions purchased relative to the catching of these products such as food, ice, fuel, oils and many other products have a great impact upon the areas economy. (New Bedford HDC, 1999)

Harbor-related businesses in New Bedford and Fairhaven account for \$671 million in worldwide sales and 3,700 local jobs. The seafood industry as a whole, core and support services, accounts for 97% of harbor sales worldwide, or \$653 million. Additionally, other waterfront area businesses contribute and estimated \$18 million in sales and nearly 600 jobs. Growth of the seafood industry over the next five years could result in an additional \$59-155 million in sales and 140-410 new jobs. (New Bedford Harbor Plan, 2000).

Since the publication of the DEIR, the City of New Bedford under the auspices of the New Bedford Harbor Development Commission (NBHDC) have completed maintenance dredging of the slip to the south of State Pier, the fairways leading thereto and a portion of the federal navigational and maintenance channel immediately northwest of the proposed CI CAD cell area (Apex, 2002).

The largest cruise ship ever to dock in the Harbor, 611 feet long by 79 feet wide, the Regal Empress, docked at the State Pier in summer 2002 (Kalisz, 2002). A total of thirty cruise ships were due to dock at the State Pier over 2002. In August 2004 a high-speed ferry is set to begin service between the State Pier and Martha's Vineyard (Providence Journal, 2003). The new high-

speed ferry operators expect to run as many as ten trips per day which equates to as many as 20 harbor passages per day, possibly some in darkness. These harbor developments are expected to be positive stimulants to the slow economy in New Bedford pegged at 12% unemployment in 2003 (Providence Journal, 2003). The State Pier is located on the New Bedford waterfront just northwest of the proposed alternative CI CAD cell site area, and well south of the other proposed alternative PIN CAD cell site area.

Deep-draft commercial fishing vessels as long as 150 feet have been servicing the new herring and mackerel processing plant located on Fish Island north of the CI area and south of the PIN CAD cell area (Commercial Fisheries News, 2002). This new small pelagic fish processing plant is expected to hire 75 employees at current capacity. The Fish Island processing plant is located on the New Bedford waterfront north of the proposed alternative CI CAD site area and south west of the proposed alternative PIN CAD cell area.

2.4 Background of the CZM DMMP

The Executive Office of Environmental Affairs (EOEA), through its office of Coastal Zone Management (CZM), is providing technical assistance to the City of New Bedford and Town of Fairhaven in support of the harbor planning objectives through the development of a DMMP for New Bedford/Fairhaven Harbor dredged sediments. The DMMP has a ten-year planning horizon. The development of this New Bedford/Fairhaven Harbor DMMP DEIR involved two project phases to address the critical issue of finding environmentally sound and cost effective disposal sites or methodologies for dredged material unsuitable for unconfined ocean disposal.

The DMMP Phase I information was used to identify baseline conditions and data gaps, and served as the basis for the preparation of the MEPA ENF for the New Bedford/Fairhaven Harbor DMMP. Phase II of the DMMP has focused on conducting the field work, research, and analysis necessary to undertake a detailed assessment of the potential environmental impacts associated with the dredged material disposal alternative(s) identified through the DMMP process.

The purpose of the DMMP for New Bedford/Fairhaven Harbor is to identify, evaluate and permit, within the Zone of Siting Feasibility (ZSF) for New Bedford/Fairhaven Harbor, a dredged material disposal site(s) or methodology with sufficient capacity over the next twenty years to accept dredged material unsuitable for unconfined ocean disposal from public and private dredging projects.

The lack of a practicable cost-effective method for the disposal of UDM in an environmentally sound manner has been a long-standing obstacle to the successful completion of dredging projects in the Harbor. The disposal alternative siting process has been closely coordinated with the City of New Bedford and Town of Fairhaven, through the Dredged Material Management Committee (DMMC).

Members of the DMMC were appointed by the City of New Bedford and Town of Fairhaven to serve in an advisory capacity to represent the interests of each community throughout the development of the DMMP. The DMMC was responsible for reviewing project related materials, holding informational sessions and communicating with the DMMP consulting team

and Harbor Master Planning Committee. Members of the DMMC included staff from the City of New Bedford’s Department of Public Works, Harbor Development Commission, business and economic development interests, Town of Fairhaven’s Executive Secretary, a member of the fishing industry and the New Bedford/Fairhaven Harbor Master Planning Committee.

Coordination with local port planning interests was an important component of the development of the New Bedford/Fairhaven Harbor DMMP DEIR. The simultaneous development of both the DMMP and the New Bedford/Fairhaven Harbor Master Plan has aided the identification of the future dredging needs for the maintenance and improvement in navigation within the Harbor and with the identification of potential sites for the disposal of UDM.

The New Bedford/Fairhaven Harbor DMMP DEIR identifies disposal alternatives with sufficient cumulative capacity to accept dredged material unsuitable for unconfined ocean disposal from public and private dredging projects for the twenty-year planning horizon. In the FEIR, the configuration of the final preferred alternative is presented for planning purposes. Final UDM capacities, continued refinement of dredging needs, regulatory analysis of the preferred alternatives, and integration of New Bedford/Fairhaven Harbor development priorities will ultimately determine specific dredging projects including CAD cell designs. For the FEIR-level planning assessment, overall need is assumed to be the total projected twenty-year volume of dredged material. Accordingly, the FEIR provides sufficient conceptual CAD cell configurations that can be created to accommodate, at a minimum, all of New Bedford and Fairhaven’s dredging needs over a ten-year period and very likely the twenty-year period depending on actual project development.

2.5 Massachusetts Environmental Policy Act (MEPA) Procedural History

The submission of the ENF for the New Bedford/Fairhaven DMMP on June 10, 1998, started the official MEPA review process for the DMMP. On July 10, 1998, pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and the MEPA Regulations (301 CMR 11.00), the Secretary of the Executive Office of Environmental Affairs (EOEA) made the determination that the New Bedford/Fairhaven Harbor DMMP requires the preparation of an Environmental Impact Report (EIR). Because the project involves the potential alteration of more than ten acres of Land Under the Ocean (a resource area regulated under the Massachusetts Wetlands Protection Act, M.G.L. c. 131, s. 40) and involves the use of state agency funding through the Seaport Bond Bill (Chapter 28 of the Acts of 1996), the New Bedford/Fairhaven Harbor DMMPs exceeded the “categorical inclusion” threshold at Section 11.25(2) of the MEPA regulations in effect in June 1998, requiring by regulation the preparation of an EIR. (Under the current MEPA Regulations, promulgated in July 1998, the New Bedford/Fairhaven Harbor DMMP exceeds the 10-acre wetland resource area alteration “Mandatory EIR” threshold at 301 CMR 11.03(a)b. The Mandatory EIR thresholds contained in the July 1998 MEPA Regulations have replaced the Categorical Inclusion thresholds from previous versions of the MEPA regulations.) The EIR for New Bedford/Fairhaven Harbor DMMP includes the DEIR submitted in 2002 and this FEIR in composite. The DEIR Certificate was issued June 14, 2002.

2.6 Scoping Summary

The Secretary's DEIR Certificate of June 14, 2002 (included in this Section of this FEIR), establishes the backbone of scope for this FEIR. The additional resource information for the FEIR includes:

- Additional geotechnical borings
- Macroenthic sampling and identification
- Current measurements and water column chemistry
- Dredging and disposal event modeling and hydrodynamic analysis
- Underwater archaeological surveys
- Physical and chemical analyses of surficial sediments

2.6.1 *Coordination with Federal Agencies*

The USACE has developed a method of coordinating the review and approval time-lines of the various federal resource agencies charged with reviewing major projects involving discharges of dredged or fill material in waters of the United States, regulated under Section 404 of the Clean Water Act or activities in tidal waters regulated under Section 10 of the Rivers and Harbors Act of 1899. Based upon the mapping overlay planning methodology developed by noted landscape architect Ian McHarg in the 1960s, the USACE's "Highway Methodology" provides a valuable tool for decision-making in a coordinated fashion. This methodology integrates the planning and design of a project with the requirements of the USACE permit regulations. The USACE serves as the coordinator of comments from the federal agencies, including the USEPA, the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS).

Participation by the USACE in the earliest stages of project planning is a key provision of the Highway Methodology. The evaluation of alternatives to the project is key to the successful completion of the methodology. Alternatives analysis are based upon the determination of the project "purpose and need" (developed under the National Environmental Policy Act (NEPA)) and the "overall/basic project purpose" required under the EPA 404(b)(1) guidelines and used by the Corps in project permitting.

The 404(b)(1) guidelines establish pass/fail environmental tests, to be completed before a determination is made on the balancing of overall project benefits versus detriments. An USEPA/USACE's Memorandum of Agreement, signed in February 1990, mandates a three-step iterative process of avoidance, minimization and mitigation of adverse impacts to wetlands functions and values (USACE, New England Division, 1993).

Application of the Highway Methodology to the New Bedford/Fairhaven Harbor DMMP DEIR involved several key milestones including the USACE's concurrence with the DEIR Outline, Basic Project Purpose (BPP), and Aquatic and Upland Zones of Siting Feasibility (ZSFs). Documentation of the USACE's implementation of the Highway Methodology was presented in the DEIR Appendix B which contains letters presenting the coordinated federal comments. For the FEIR, the USACE was helpful to confer and develop the sampling plan methodology to determine the UDM vertical horizon (Section 8.0, Appendix A).

2.6.2 Coordination with State Agencies

Because of the array of permits required from the state to implement various disposal types and technologies proposed, DMMP planning has also required the close coordination with state regulatory agencies, particularly the Department of Environmental Protection (DEP), Division of Marine Fisheries (DMF) and Massachusetts Historical Commission (MHC). The broad-reaching policy issues involved in the disposal of UDM have also been explored with these agencies, and will require continued coordination through the development of the FEIR. Close coordination with state agencies was essential to developing this FEIR. However, all statements and conclusions contain herein are the sole responsibility of CZM. State agencies will be reviewing and formally commenting to MEPA on the content and conclusion of this FEIR pursuant to their regulatory oversight responsibilities.

2.6.2.1 Department of Environmental Protection

Since Massachusetts does not have comprehensive regulations for the disposal of dredged material, DEP Divisions with jurisdiction over UDM disposal including: Wetlands and Waterways, Water Pollution Control, Waste Site Cleanup and Solid Waste Management were approached at key DMMP milestones. DEP agencies reviewed and concurred with the site selection criteria developed to insure consistency with existing state regulations. Issues regarding aquatic disposal were discussed at numerous meetings, phone calls and e-mail correspondence.

2.6.2.2 Division of Marine Fisheries

DMF participation in, and oversight of, investigations of marine resources conducted in support of the DMMP was invaluable to developing the detailed assessments provided in the DEIR. Communications regarding Harbor preferred alternatives shellfish mitigation were conducted with the DMF Regional shellfish biologist for shellfish mitigation planning of this FEIR. The on-going coordination with DMF has played an integral role in data collection and identification of areas needing further study for the New Bedford/Fairhaven Harbor DMMP.

2.6.2.3 Massachusetts Board of Underwater Archaeological Resources

As the sole trustee of the Commonwealth's underwater heritage, the Massachusetts Board of Underwater Archaeological Resources (MBUAR) is committed to promoting and protecting the public's interests in these resources for recreational, economic, environmental, and historical purposes. Under Massachusetts General Law Chapter 6, sections 179-180, and Chapter 91, Section 63, the Board is charged with the responsibility of encouraging the discovery and reporting, as well as the preservation and protection, of underwater archaeological resources. Because the Board's jurisdiction extends over the inland and coastal waters of the state, the siting of aquatic disposal alternatives has been sensitive to the MBUAR's charge. Ongoing communication and with the MBUAR will continue throughout the remainder of the New Bedford/Fairhaven Harbor DMMP planning process.